

In re: David Eric Appleford et al. Inter. App. No. PCT/GB03/002771 Inter. Filing Date: June 27, 2003

Page 2

10/518169 DT01 Rec'd PCT/PTC 15 DEC 2004

## Amendments to the Claims:

1. (Currently amended) An underwater hydrocarbon reservoir water injection system (1) for removing particulates from water, comprising:

separating means (5) for removing particulates from water[[,]]; and

pumping means (8) downstream from the <u>said</u> separating means (5) for drawing surrounding water upstream of the <u>said</u> separating means into the <u>said</u> separating means[[,]];

characterised in that wherein the said system is incorporated into a retrievable module (2) for use with a modular seabed processing system[[,]];

wherein the said separating means comprises dynamic separating means (5) comprising a hydrocyclone; and

wherein the said system (1) further includes comprises means (6) for collecting particulates separated from said water by the said dynamic separating means (5), means (7, 32) for removing collected particulates from the said particulate collecting means (6) and means (24, 30) for directing at least some of the at least substantially particulate free water from the said dynamic separating means (5) to the said particulate removal means (7, 32) to enable the said particulate removal means to remove collected particulates and eject them into water surrounding the module (2).

In re: David Eric Appleford et al. Inter. App. No. PCT/GB03/002771 Inter. Filing Date: June 27, 2003

Page 3

- 2. (Currently amended) The system as claimed in claim 1, wherein the said pumping means (8) is arranged to inject at least substantially particulate free water from the said dynamic separating means (5) into a hydrocarbon reservoir at a pressure higher than the pressure of fluid in the said reservoir.
- 3. (Currently amended) The system as claimed in claim 1 or 2, including a combined dynamic separating and particulate collecting means (31).
- 4. (Currently amended) The system as claimed in any preceding claim 1, wherein the said particulate removal means (7) is arranged to periodically remove collected particulates.
- 5. (Currently amended) The system as claimed in claim 1,  $\frac{2 \text{ or } 3}{2}$ , wherein the said particulate removal means  $\frac{32}{2}$  is arranged to continuously remove collected particulates.
- 6. (Currently amended) The system as claimed in any preceding claim 1, wherein the particulate removal means (32) comprises a venturi flume.
- 7. (Currently amended) The system as claimed in any preceding claim 1, including comprising a filter (13) upstream of the said dynamic separating means (5).

In re: David Eric Appleford et al. Inter. App. No. PCT/GB03/002771 Inter. Filing Date: June 27, 2003

Page 4

8. (Currently amended) An underwater method for removing particulates from water and injecting the resulting water into a hydrocarbon reservoir, comprising the steps of:

pumping water downstream of separating means (5) to draw surrounding water upstream of the separating means into the separating means[[,]]; and

separating particulates from the water in the separating means and injecting the resulting water into a hydrocarbon reservoir[[,]];

characterised in that wherein the separation occurs in a retrievable module (2) for use with a modular seabed processing system, the particulates are separated from the water in dynamic separating means (5) comprising a hydrocyclone and collected in a collecting means, (6) then removed from the collecting means (6) by particulate removal means (7) to which at least some substantially particulate free water from the dynamic separating means (5) is directed to enable the particulate removal means (7) to remove collected particulates and eject them into water surrounding the module (2).

9. (Currently amended) The method as claimed in claim 8, including the subsequent step of injecting at least substantially particulate free water from the dynamic separating means (5) into a hydrocarbon reservoir at a

In re: David Eric Appleford et al. Inter. App. No. PCT/GB03/002771 Inter. Filing Date: June 27, 2003

Page 5

pressure higher than the pressure of fluid in the reservoir.